AMENDMENT

1. (Currently Amended) Anthraquinone dye compounds having the formula X. or formula XIV.:

$$(R_sS)_{m_1} O NH - X_1 - L - X_2 - Q$$

$$(R_sS)_{m_1} O NH - X_2 - Q$$

$$R_sS)_{m_1} O NH - X_2 - Q$$

$$R_sS)_{m_1} O NH - X_2 - Q$$

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VII.
$$R_9$$
 NH O S X_2 CH $_2$ $C(R_8)$ =CH $_2$ X_2 CH $_2$ $C(R_8)$ =CH $_2$

$$X. \qquad \begin{array}{c} R_s \cdot S & O & S - L_1 \cdot Z \cdot Q \\ \\ Q \cdot Z \cdot L_1 - S & O & S \cdot R_s \end{array}$$

$$\begin{array}{c|c}
R_{5}S & S & X - L \rightarrow Z - Q \\
\hline
XII. & R & X - L \rightarrow Z - Q
\end{array}$$

$$\begin{array}{c|c}
 & N - N - \left[L - Z \right]_{m} Q \\
 & S - C - N - C - R_{2}
\end{array}$$

$$\begin{array}{c|c}
 & R_{5} - S - C - N - C - R_{2}
\end{array}$$

$$\begin{array}{c|c}
 & N - \left[L - Z \right]_{m} Q - C - C - R_{2}
\end{array}$$

$$\begin{array}{c|c}
 & N - \left[L - Z \right]_{m} Q - C - C - R_{2}
\end{array}$$

XIV.
$$R_5 - S \longrightarrow O \longrightarrow S - L_1 - Z - Q$$

$$R_5 - S \longrightarrow O \longrightarrow S - L_1 - Z - Q$$

$$R_{5} - S \qquad O \qquad S \qquad X_{2}CH_{2} \qquad C(R_{0}) = CH_{2}$$

$$R_{5} - S \qquad O \qquad S \qquad X_{2}CH_{2} \qquad C(R_{0}) = CH_{2}$$

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XVIII. R
$$X_{A}CH_{2}$$

$$C(R_{g}) = CH_{2}$$

$$X_{4}CH_{2}$$

$$C(R_{g}) = CH_{2}$$

$$\begin{array}{c|c}
N-N-\left\{L-z\right\}_{m}^{Q} \\
0 & s-c. \\
N-c. \\
N-$$

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

wherein:

R is selected from hydrogen or 1-3 groups selected from C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy and halogen;

 R_1 is selected from C_1 — C_6 -alkyl, substituted C_1 — C_6 -alkyl, C_3 — C_8 -alkenyl, C_2 — C_8 -cycloalkyl, aryl and L_1 -Z-Q;

 R_2 = selected from hydrogen is hydrogen, C_1 - C_6 -alkyl, substituted C_1 - C_6 -alkyl, C_3 - C_8 -cycloalkyl-and aryl or aryl;

R₃ and R₄ are independently selected from C₁ - C₆ alkyl and bromine;

 R_5 is selected from C_1 - C_6 -alkyl, substituted C_1 - C_6 alkyl, C_3 - C_8 -cycloalkyl, aryl, heteroaryl, - L_1 -Z-Q,

R₆-is selected from

 R_{2} -is selected from hydrogen, substituted or unsubstituted C_{1} - C_{6} -alkyl, C_{1} - C_{6} -alkoxy, halogen, hydroxy, substituted or unsubstituted C_{1} - C_{6} -alkylthio, sulfamoyl and substituted sulfamoyl;

R₈ is selected from hydrogen and hydrogen or C₁ - C₆-alkyl;

R₉ is selected from the groups represented by R₁ and L Z - Q;

R₁₀ is selected from hydrogen and halogen;

X is a covalent bond or a divalent linking group selected from -O-, -S-, -SO₂-, -CO₂-, -CO₁-, -CON(Y) - and -SO₂N(Y)-, wherein Y is selected from hydrogen, C_1 - C_6 -alkyl, substituted C_1 - C_6 -alkyl, C_3 - C_8 -cycloalkyl, C_3 - C_8 -alkenyl, aryl and aryl or -L-Z- Q;

X₄ is selected from O , S , SO₂ and SO₂N(Y) ;

 X_2 is selected from $-CO_2$ - and $-SO_2N(Y_1)$, wherein Y_1 is a group selected from hydrogen, C_1 - C_6 -alkyl, substituted C_1 - C_6 -alkyl, C_3 - C_8 -alkenyl, C_3 - C_8 -cycloalkyl, aryl, heteroaryl and or $-CH_2$ -p- C_6H_4 - $C(R_8)$ = CH_2 ;

X₂ is selected from -CO₂-, -SO₂N(Y);

 X_4 is selected from CO_2 , O and $SO_2N(Y_4)$;

L is a divalent linking group selected from C_1 - C_8 -alkylene, C_1 - C_6 -alkylene-arylene, arylene, C_1 - C_6 -alkylene-arylene - C_1 - C_6 -alkylene, C_3 - C_8 -cycloalkylene, C_1 - C_6 -alkylene - C_3 - C_8 -cycloalkylene - C_1 - C_6 -alkylene, C_1 - C_6 -alkylene - C_1 - C_6 -alkylene - C_1 - C_6 -alkylene and or C_2 - C_6 -alkylene- C_1 - C_6 -alkylene- C_1 - C_6 -alkylene and or C_2 - C_6 -alkylene- C_1 - C_2 - C_6 -alkylene- C_1 - C_1 - C_2 - C_6 -alkylene- C_1 - C_1 - C_2 - C_6 -alkylene- C_1 - C_1 - C_2 - C_1 - C_2 - C_1 - C_2 - C_3 -alkylene- C_1 - C_3 - C_4 -alkylene- C_1 - C_4

 L_1 is a divalent linking group selected from C_2 - C_6 -alkylene, C_1 - C_6 -alkylene- C_3 - C_8 -cycloalkylene- C_1 - C_6 -alkylene, C_1 - C_6 -alkylene-arylene, C_3 - C_8 -cycloalkylene, and C_2 - C_6 -alkylene- $[-Z_1$ - C_2 - C_6 -alkylene- $]_n$ -, wherein Z_1 is -O-, -S- or -SO₂- and n is 1-3;

L₂ is selected from C₂-C₆-alkylene, C₁-C₆-alkylene arylene C₁-C₆-alkylene and C₁-C₆-alkylene C₂-C₈-cycloalkylene C₄-C₆-alkylene;

Z is a divalent group selected from -O-, -S-, -NH-, -N(C_1 - C_6 -alkyl)-, -N(C_3 - C_8 alkenyl)-, -N(C_3 - C_8 cycloalkyl)-, -N(SO_2C_1 - C_6 -alkyl) and or -N(SO_2 aryl)-, provided that when Q is a photopolymerizable optionally substituted maleimide radical, Z represents a covalent bond;

Q is an ethylenically-unsaturated, photosensitive polymerizable group; and $\frac{m}{m}$ and $\frac{m_1}{m_1}$ each is 0 or 1.

2. (Currently amended) Anthraquinone compounds according to Claim 1 wherein the ethylenically-unsaturated, photosensitive copolymerizable groups represented by Q are selected from the following organic radicals:

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Ia $-COC(R_{11})=CH-R_{12}$

IIa $-CONH-COC(R_{11})=CH-R_{12}$

IIIa -CONH-C₁ - C₆-alkylene OCOC(R₁₁) -CH=CH-R₁₂

IVa $\begin{array}{c}
R_{1\overline{3}} \\
-\text{CO-C-NHCOC}(R_{11}) = \text{CH-R}_{12} \\
R_{14}
\end{array}$

Va -COCH=CH-CO₂R₁₅

VIa -CO-C(R₁₁)=CH₂

VIIa -CH₂-C(R₁₁)=CH₂

VIIIa -CONH C - C(R₁₁)=CH₂

IXa $-SO_2C(R_{11})=CH_2$

Xa -N R₁₆ And

$$\begin{array}{cc} \text{CH}_2 & \text{CH}_2 \\ \text{II} & \text{-COCH}_2\text{CCO}_2\text{R}_{15} \text{ and/or -COCCH}_2\text{CO}_2\text{R}_{15} \end{array}$$

wherein:

R₁₁ is selected from hydrogen and hydrogen or C₁-C₆-alkyl;

 R_{12} is selected from hydrogen; C_1 - C_6 -alkyl; phenyl and or phenyl substituted with one or more groups selected from C_1 - C_6 -alkyl, C_1 - C_6 -alkoxy, -N(C_1 - C_6 -alkyl), nitro, cyano, C_1 - C_6 -alkoxycarbonyl, C_1 - C_6 -alkanoyloxy and halogen; 1—and 2—naphthyl 1- or 2-naphthyl which may be substituted with C_1 - C_6 -alkyl or C_1 - C_6 -alkoxy; 2—and 3—thienyl 2- or 3-thienyl which may be substituted with C_1 - C_6 -alkyl or halogen; or 2- or 3-furyl which may be substituted with C_1 - C_6 -alkyl;

 R_{13} and R_{14} are selected from hydrogen, C_1 - C_6 -alkyl, substituted C_1 - C_6 -alkyl, aryl or may be combined to represent a $-[-CH_2-]_{3-5}$ - radical;

 R_{15} is selected from hydrogen, C_1 - C_6 -alkyl, substituted C_1 - C_6 -alkyl, C_3 - C_8 -alkenyl, C_3 - C_8 -cycloalkyl and aryl or aryl;

 R_{16} is selected from hydrogen, C_1 - C_6 -alkyl-and aryl or aryl.

Claims 3 – 10 (Canceled)

11. (Original) Anthraquinone compounds according to Claim 2 having the formula:

wherein Z is -O-.

Claims 12 and 13 (Canceled)

14. (Original) Anthraquinone compounds according to Claim 2 having the formula:

XIV.

wherein Z is -O-.

Claims 15 – 18 (Canceled)

- 19. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical la.
- 20. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical la wherein R_{11} is hydrogen or methyl and R_{12} is hydrogen.
- 21. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIa.
- 22. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIa wherein R₁₁ is hydrogen.
- 23. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIIa.
- 24. (Original) Anthraquinone compounds according to Claim 2 wherein Q is organic radical VIIIa wherein R_{11} is hydrogen or methyl and R_{13} and R_{14} are methyl.

Claims 25 - 46 (Canceled)

47. (Original) A coating composition comprising (i) one or more polymerizable vinyl compounds, (ii) one or more of the dye compounds of Claim 1, and (iii) a photoinitiator.

- 48. (Currently amended) A coating composition according to Claim 47 comprising (i) one or more polymerizable vinyl compounds, (ii) one or more of the dye compounds of Claim 2 present in a concentration of about 0.05 to 15 weight percent based on the weight of component (i), and (iii) a photoinitiator present in a concentration of about 1 to 15 weight percent based on the weight of the polymerizable vinyl compound(s) present in the coating composition.
- 49. (Original) A coating composition according to Claim 48 wherein the polymerizable vinyl compounds comprise a solution of a polymeric, polymerizable vinyl compound selected from acrylated and methacrylated polyesters, acrylated and methacrylated polyethers, acrylated and methacrylated epoxy polymers, acrylated or methacrylated urethanes, and mixtures thereof, in a diluent selected from monomeric acrylate and methacrylate esters.
- 50. (Currently amended) A polymeric coating composition comprising a polymer of one or more acrylic acid esters, one or more methacrylic acid esters and/or other or other copolymerizable vinyl compounds, having copolymerized therein one or more of the dye compounds defined in Claim 1.
- 51. (Currently amended) A polymeric <u>coating</u> composition according to Claim 50 comprising a coating of an acrylic polymer of one or more acrylic acid esters, one or more methacrylic acid esters or a mixture thereof having copolymerized therein one or more of the dye compounds defined in Claim 2.
- 52. (Currently amended) A polymeric coating composition according to Claim 50 comprising a coating of an unsaturated polyester containing one or more maleate/fumarate residues; one or more monomers which contain one or more vinyl

ether groups, one or more vinyl ester groups, or a combination thereof, and, optionally, one or more acrylic or methacrylic acid esters; or a mixture thereof having copolymerized therein one or more of the dye compounds defined in Claim 2.

53. (Currently amended) A polymeric coating according to Claim 51 containing from about 0.05 to 15.0 weight percent of the residue of one or more of the dye compounds of Claim 2 based on the weight of the coating.